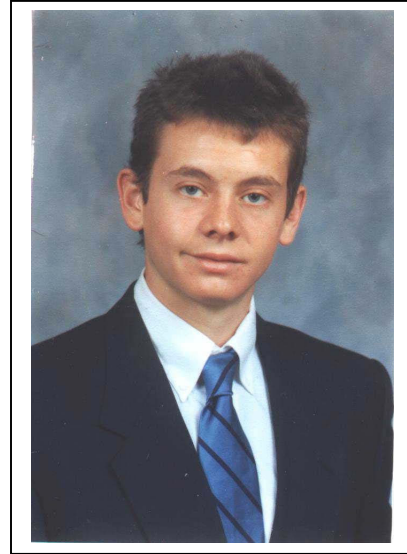


**Vanderbilt University**  
Nashville, TN

**Biomedical Engineer**  
Bachelor of Science, May 2004

**NASA Academy Research Project:  
Educational Activities in Astrobiology**

Principal Investigator: Dr. David Morrison



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**Education and Experience:**

I am currently a junior in the school of engineering at Vanderbilt. My major is Biomedical Engineering. This course of study has allowed me to pursue my two main academic interests: science and engineering. The curriculum consists mainly of engineering concepts applied to the human body and medicine. I have taken courses such as: Physiological Transport Phenomena, Systems Physiology, Thermodynamics, Biomechanics, Medical Imaging, and Biological Statistics. I enjoy the course work because the focus is on the integration of systems with the body rather than on the systems themselves.

Last summer, as a member of the NASA Undergraduate Student Research Program I worked with two other interns to design and build an electromagnetic levitation system intended to simulate microgravity conditions. I also presented a poster entitled, "*Microgravity Simulation Using a Three Dimensional Electromagnetic Coil System and Its Applications to Astrobiology*," at a poster session and was a secondary author on two other posters. My partners and I collaborated on a research paper documenting our findings. Working at Ames Research Center last summer under Dr. Richard Boyle in the BioVis laboratory was the best research experience that I have ever had, and it is the main reason that I chose to return this summer.

**Extracurricular Activities:**

Growing up in Indiana I have always been an avid basketball player. I played for two years in high school along with four years of soccer. I also enjoy snowboarding and wakeboarding. The midwest and the south do not offer the best skiing, but I have gone to Colorado for spring break two years in a row and I find opportunities to enjoy the snow in my area when I get the chance. Wakeboarding has remained a hobby of mine since early on in high school despite the fact that neither my family nor I own a boat. I do, however, find a way to convince my friends to take me as often as possible and will probably spend a week wakeboarding on a lake in Tennessee with some friends before heading out to California this summer.